

SD2229 Vehicle Dynamics Project Course Part 1 7.5 credits

Projektkurs i fordonsdynamik del 1

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for SD2229 valid from Autumn 2012

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Vehicle Dynamics Project course part 1 is a requirement.

Vehicle Dynamics SD2225, EL1000 Automoatic Control, MF2030 Mechatronics, MF1016 Electronics, MF2019 CAD 3D-modelling and visualization or similar courses.

The course target students in the end of their Master studies from programs connected to the courses mentioned above.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The aim of the course is to let the students apply their knowledge through a project assignment in areas connected to vehicle dynamics. E.g. Developmen, analysis and validation of a new suspension concept, chassis, powertrain etc. The course should give the students great experience of working in a development team similar to industry where the course process should resemble the industry process. This in order for the students to be more prepared for their future work tasks.

Course contents

The course will each year have projects for 5-9 students where the project will come from industry and university. Meaning if the course will have 18 students the course will have at least 2 projects. In this project course the following steps will be done in each project:

- Benchmarking and related technology
- Brainstorming and idea generation
- Produkt definition and analysis

Disposition

Following parts will be included in grading:

- · Individual meetings with teacher
- Board review (part-time presentations)
- Final presentation
- Final report

Final grades is a joint evaluation of the obligatory parts mentioned above.

Course literature

Course litterature will be available on course webpage at BILDA: bilda.kth.se.

Examination

• PRO1 - Report, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

They who will also study SD2230 will only have one Board Review, one Final report and one Final presentation at the end of project course part 2 SD2230.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.